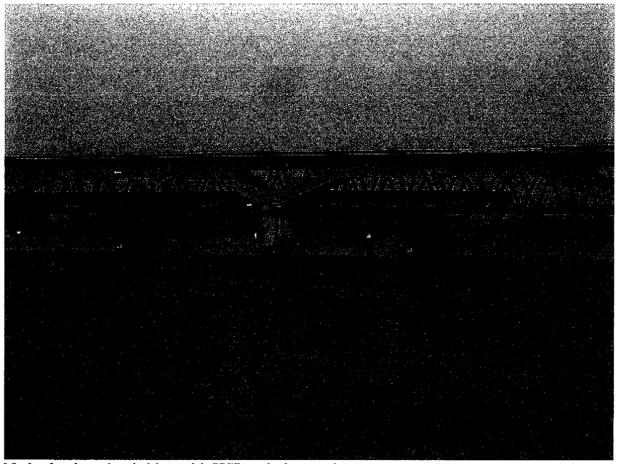
Comment Letter O069 Continued



Netherlands swing bridge with HSR train in transit.

Attachment F

A CHEAPER, LESS DISRUPTIVE WAY TO BUILD HIGH SPEED RAIL IN THE CENTRAL VALLEY

HSR Should Serve San Joaquin Cities, Not Destroy Them

By Alan C. Miller and Richard Tolmach

We all know the promise of high speed rail, which promotes central-city revitalization in Europe while simultaneously discouraging sprawl. But Californians have missed an important piece of the picture: the technology was never meant to run through cities at high speeds. Due to noise constraints and prohibitive costs, 200-plus mile per hour trains should not pass through Central Valley cities. Yet their stations need service by the fast trains. How did the Europeans deal with this basic quandry? (For a hint, see map, right).

Speed Without Urban Impacts

In a rational plan dictated by engineering and environmental concerns, the 220 mph main line would never touch urban areas. Most Valley cities would be served by semi-expresses starting their runs on Burlington Northern Santa Fe (BNSF) tracks where state-funded upgrades promise to raise speeds above 100 mph. Then the trains would switch, outside Fresno, Modesto, or Bakersfield to the high speed line for nonstop service to the Bay Area and Los Angeles. Ordinary trains would link all current stations between Bakersfield and Sacramento to the high speed service.

HSR main lines do not belong in the center of urban areas because of their 220 mph top speeds. HSR trains operating above 160 mph produce a sound envelope similar to the one at the end of a runway, clearly not compatible with cities. This envelope reaches as much as 95 decibels near the source at 186 mph.

While some sound-reduction technologies (such as wheel-skirts and sound walls) have proven effective, they will not reduce high speed travel noise to a level compatible with residential or commercial development. Putting HSR through cities at 220 mph is like putting freeways through them, only louder.

CHSRA Vetoes Viable Routes

According to Dan Leavitt of the California High Speed Rail Authority (CHSRA), the public wants the 220 mph tracks right through the cities. We doubt this is really the case. Leavitt says focus groups held in the Central Valley indicated opposition to a new right-of-way, but this seems to show that the Authority did not inform them of the consequences. Leavitt also claims that it is difficult to acquire large land parcels, the precise opposite of state agencies' long experience. CHSRA decided to eliminate all route options in the Central Valley except two rather improbable ones: the Union Pacific Railroad right-of-way beside Highway 99 or the Burlington Northern & Santa Fe Railway right-of-way used by the San Joaquins.

Either of these historic routes has more than enough physical constraints to keep high speed trains from ever being implemented. As Amtrak discovered to its chagrin with Acela, existing rail rights-of-way are highly toxic from past dumping and full of very costly obstacles.

Has CHSRA really thought this through? 100-foot wide railroad rights of way are a tight space to even add a light rail line with narrower loading gauge, as Sacramento's Regional Transit knows from its South Line. High speed rail needs more than half the 100-foot width just for the track and poles, even before considering security issues. A long and substantial crash barrier would have to be built to prevent a derailed freight train from the adjacent line from damaging the supports of a structure or falling into the path of a high speed train.

Virtually none of the existing railroad overpasses are wide enough to accommodate a new double track line next to the existing one. If the UP route were used, all overpasses all the way up and down Highway 99 would need to be rebuilt and all grade crossings removed and rebuilt as grade separations for four tracks, with extra space betwen freight tracks and HSR.

Building through towns creates even more obstacles, and astronomical costs. Some buildings may have to be removed to accommodate the line. There would be massive demolition and earthmoving. This kind of disruption is as dumb as the idea of a new generation of urban

freeways. This would happen not just in one city but in every city and town betwen Stockton and Bakersfield. If any city sees this as a problem, Leavitt believes that the line could be undergrounded, like a statewide BART project.

Is CHSRA Building "FART"?

Cities would have four track underground stations, according to Leavitt, two tracks for nonstop expresses and two for deceleration and station tracks. According to CHSRA speed profiles, expresses would go through the stations at 220 mph, and would therefore have to be physically separated from the other tracks, to prevent hearing loss in waiting passengers, and to prevent kids or seniors being swept off the platform by an express.

The idea of subway stations throughout the Valley, especially the CHSRA plan for a six-track underground station for Fresno, gives that old joke about "Fresno Area Rapid Transit" new currency. Except this time, they're serious!

Saying you are going to blast through the cities at 220 mph is an obvious way to create opposition and design problems. The CHSRA plan to use existing rights-of-way will produce one of two bad outcomes. Either you get:

1) a system that slows for every city and town and doesn't meet HSR standards–essentially a very long BART system, or
2) a plan so costly it will never be built–but studies of how to build the structures and trenches could be carried out for decades.

One wonders if number 2 is the true plan: perpetual planning and engineering contracts. TRAC aims to see this does not happen.

Let's Use Europe's Experience

It's time for Valley leaders to firmly reject the persistent bad idea floated by CHSRA staff in planning circles: that 220 mph trains must use existing rail corridors. This emotional ploy ignores the purpose of the new line, to bypass the congestion and terminal slowness of the existing rail corridors, to allow rail to effectively compete with highway travel.

We all know that not every train can serve every city, so how about optimizing the CHSRA route plan to fit its business plan? First of all, let's take a look at schedules in CHSRA's 2000 Final Business Plan. The Plan proposes five service levels: express, semi-express, suburban-express, local and regional. Only 37 percent of through trains in this scenario stop in Fresno. It appears that even fewer, about 25 percent, stop in other Valley cities. A practical approach would keep these 100 trains a day that are only going to blitz through at 220 mph on a main line that avoids cities.

Dan McNamara, Vice President of TRAC, points out that the reason the French National Railway could build the original TGV line for $7 million per mile was its design as a bypass to avoid city congestion. Burgundy's cities were spared the disruption of constructing the new rail line, and all the noise, but still got improved rail service, via TGV connections in Dijon and Lyon. "The French realized a new line was the only way to make 186 mph speeds, and also the only affordable route," said McNamara. "It doesn't take a genius to understand that the only way California's line will be affordable is if it is planned to run where it avoids known problems."

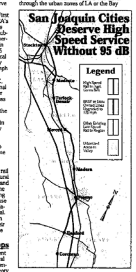
The French have found that high speed rail is very compatible with a variety of agricultural uses, including some of Burgundy's best Grand Cru Chablis vineyards and dairy farms. In the Central Valley, especially where land is being taken out of production or dry farmed because of mineral buildup, the impact of having adjacent nonstop rail service is relatively minimal. A Texas farming delegation which had been critical of a high speed line learned from their European compatriots that even cows ignore the trains after about a month or two.

Greenbelts-Not Greenfield Stops

Another myth floating around government circles is that high speed through agricultural lands would induce sprawl by creating 'greenfield' stations far outside city limits. The theory is that all stations would be built 10 miles from town in the middle of rich farmlands. Since people would want to live near the station, the reasoning goes, Valley cities would spread out with single family houses destroying farmland.

The legislation which creates high speed rail should include a land-use element which strictly forbids the building of stations along the HSR mainline in perpetuity. Land adjacent to the main line is ideally suited as an agricultural preserve, and it is worthwhile to fund this preservation with a specific set-aside. This would produce a greenbelt to protect the line, isolate people from the sound envelope, and prevent sprawl. The mistake California made with building up to the edges of airports should not be repeated with HSR.

Lest anyone use the discussion on noise as evidence to oppose high speed rail in the Bay Area or LA Basin, a caution is required. The 95 decibel sound envelope is only created by air pressure when the trains are near top speed (over about 180 mph). At 125 mph, the maximum speed at which HSR trains will travel through the urban zones of LA or the Bay



Area, HSR trains are actually quieter than a conventional passenger train at 80 mph or a freight train at 45 mph.

Make Use of Rail Investments

High speed rail cannot live in a vacuum, and ignore the hundreds of millions of dollars Caltrans has invested in San Joaquin tracks.

Unfortunately, CHSRA has not articulated a vision as to how conventional San Joaquin trains would connect with high speed rail.

The dot chart below shows one plausible way of integrating five north-south routes to provide high speed travel between Los Angeles, the Bay Area, and Sacramento, without neglecting or damaging Central Valley cities along the way.

San Joaquin conventional service will continue to play a major role in feeding passengers to the high speed rail system. We show this happening in two different ways: conventional trains meet HSR trains at common stations in major Valley cities, and HSR equipment itself runs on sections of the San Joaquin line. The final shape of the solution depends on a 'meeting of the minds' between the Federal Railroad Administra-tion and equipment manufacturers over crashworthiness standards .

In either scenario, conventional rail will be brought up to FRA Class VII standards, allowing 125 mph operation. With 125 mph top speeds, and a Fresno midpoint hub, access times from San Joaquin stations to the nearest high speed transfer station would be a matter of minutes.

Main Line & Downtown, Too

The right rail plan for Fresno, to spur city-core renewal, corporate investment, and a vital pedestrian-oriented core requires that it be the hub station of the network. Luckily, Fresno happens to have the right geography for this role.

In this scenario, about 80 trains daily would stop in Fresno at a new intermodal terminal at the former SP station to exchange passengers. Like a hub airport, this station would perform the function of connecting all major California cities without trains making too many intermediate stops. Most trains would zip past Fresno miles to the west at 220mph, stirring up a few aphids, but disturbing no humans.

The Fresno loop can be viewed as an interstate highway business loop. Just as drivers with business in the town can take the offramp, trains with passengers to transfer can take the loop. Several miles north of Fresno, southbound HSR trains would curve off the main line and join the planned joint Union Pacific / BNSF main line (see map left). After a brief stop, trains would accelerate back to 125 until outside the Fresno city limits, where they would regain 220 mph on the HSR main line to the south.

Fresno, as a midway connection point, allows Madera, Merced, Hanford and Corcoran easy high speed access. Similarly, branches of the high speed line would give Modesto, Stockton, Sacramento and Merced direct high speed service. The overall level of rail service to every Valley city would improve, without major negative impacts.

Study Proper Alternatives

An environmental study of infeasible alternatives is inherently wasteful of time and financial resources. By moving ahead with environmental work while the project concept is still half-baked, the CHSRA has made a classic and fateful mistake that stands a good chance of setting California high speed rail back by a another decade.

At this juncture, it is valuable to look at what caused CHSRA to get the alternatives so wrong. The most cogent explanation is that CHSRA's inadequate staff, lacking engineering or railroad experience, has been unable to control a contracter with dual conflicts of interest: bigger airport projects and bigger highway projects which both would be threatened by successful high speed rail.

A Quieter Way to Connect Valley Cities

Five types of train service interconnect at Fresno to give whole Valley better service.

HIGH SPEED RAIL POLICIES

A. California High-Speed Rail (CHSR) must be integrated and compatible with conventional passenger rail services and the equipment built to standards that allow this.

B. CHSR network needs to be composed of portions of upgraded conventional routes plus the High-Speed Rail (HSR) main line. The upgraded segments must be part of the overall HSR plan and clearly stated as part of the HSR initiative. HSR operation on these segments should be in cooperation with conventional rail agencies that will also benefit from the upgrades.

C. 200mph-plus service must be achieved over the vast majority of the route (Santa Clarita to Redwood City if via Altamont or Santa Clarita to just-outside San Jose for other routes). This is necessary to obtain a 2 1/2 hour San Francisco-Los Angeles travel time, financial feasibility and congestion relief.

D. The Central Valley HSR mainline must be capable of sustained 220mph operation and built west of Highway 99 well outside of urban areas.

E. 200mph+ service creates sound envelopes incompatible with urban areas. 200mph-plus main-line right-of-way CANNOT pass through populated areas. Trains that serve major Central Valley cities need to diverge from the HSR mainline on parallel connector tracks that serve downtown stations.

F. The HSR legislation must include the following strict land-use restrictions:

- No stops on the 220mph mainline.
- Stops only in center-cities on diverging city 'local routes'.
- Land along the HSR mainline will retain permanent agricultural green belt zoning.

G. Support the CHSR Authority plan to start HSR at Irvine (south end) to serve Orange County and to build the LA-San Diego HSR route inland via Riverside and Escondido.

H. The HSR mainline southern mountain crossing should be via the direct Bakersfield-LA 'Grapevine' route in the proximity of I-5.

I. Monies for the overall CHSR project should include funds for an upgraded line from Santa Clarita to Palmdale that would meet HSR specifications and thus allow for extension of the line to Bakersfield or Las Vegas.

J. The CHSR Authority should consider service to the Sacramento Stockton-Modesto area in the initial phase of HSR and select the Bay Area-Central Valley alignment that serves these cities best.

K. The CHSR Authority must select the most cost-effective and versatile route for a San Francisco Bay Area to Central Valley crossing and re-examine the Altamont/Hetch-Hetchy alignment as a candidate route.

L. If the CHSR Authority selects a Central Valley to Bay Area alignment via Panoche, Pacheco, or 'Diablo Range' routes then it must include crossing San Francisco Bay at San Francisco to serve the population of the East Bay and the I-80 corridor and upgrade the Capitol Corridor to HSR standards to Sacramento.

M. Both San Jose and San Francisco require their own direct express service to Los Angeles. San Jose is best served by a route plan that makes it a northern California terminal on an equal footing with San Francisco and Sacramento.

N. CHSR should not be built as a typical public works project, but put to competitive bids as a turnkey project to designbuild/ operate consortiums with a history of HSR success. These could be private-public partnerships.

Comment Letter O069 Continued

Tuesday, August 31, 2004 3:52 PM Stuart Flashman (510) 652-5373 p.53

Attachment F

A CHEAPER, LESS DISRUPTIVE WAY TO B

HSR Should Serve San Joa

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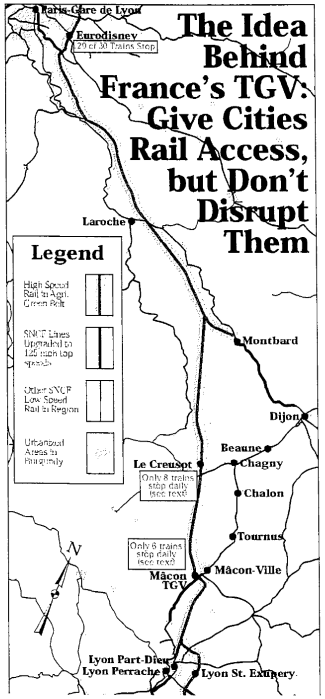

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Response to Comments of Stuart M. Flashman, Attorney, Train Riders' Association and California Rail Foundation, August 31, 2004 (Letter O069)

O069-01

Please see responses to Comments O069-2 through O069-20.

O069-02

Please see standard response 2.18.1. The Program EIR/EIS appropriately recognizes, describes, and references the Commission's studies (see Section 2.3.1). Please see response to Comment AS004-8 (State Parks) regarding the need for HST to be at the centers of the cities. The co-lead agencies are unaware of any HST system anywhere in the world (including the NorthEast Corridor in the U.S.) that has been implemented that is similar to the network described by State Parks. The Program EIR/EIS does evaluate and weigh the benefits of potential HST station sites at "central cities" versus "outlying" stations to serve the Central Valley population. Many of the "outlying" sites in the Central Valley were eliminated as part screening for the Program EIR/EIS, due to their higher potential for adverse environmental impacts (please see standard response 2.25.1). Please also refer to standard response 2.1.12 in regards to the identification of preferred station locations. The purpose and need statement complies with NEPA and CEQA requirements.

O069-03

Please see standard response 10.1.7. While the Commission discussed several phasing concepts, it made no preference or recommendation regarding the phasing of a statewide HST system. However, the Commission did determine that the links to Sacramento and San Diego were "vital to the feasibility of the project" (High-Speed Rail Summary Report and Action Plan, December 1996, page 8-28). Please also see standard response 2.13.1. The development of a financing plan for the HST Alternative is beyond the scope of this program EIR/EIS process. Please see standard response 2.18.1 in regards to further investigation of the Altamont Pass. The ridership and revenue forecasts and the HST Alternative did not assume expansion of the local transit services beyond the level of the No Project Alternative. Please see standard response 1.1.5 in regards to the role of the Authority and the implementation of public transit systems. Please see Section 3.1 of the Program EIR/EIS "Traffic and Circulation" for the summary of the traffic and transit impacts done for this program EIR/EIS process. Please see Section 2 for a summary of the system alternatives which includes discussion of the formulation of the alternatives and the alternatives considered and rejected. Contrary to your comments, the Program EIR/EIS states that it is not assumed that the HST proposal would negate the potential need to expand airports and highways (Section 2.5.2). The co-lead agencies did consider, but rejected including conventional rail improvements as part of the Modal Alternative, please refer to Section 2.5.1C. The co-lead agencies believe that the alternatives analysis in this program EIR/EIS fully meets the requirements of CEQA and NEPA.

O069-04

Please see standard response 2.18.1.

O069-05

Please see standard response 2.25.1.

O069-06

Please see standard response 6.15.4. The Authority has identified the BNSF alignment option as the preferred HST alignment between Fresno and Bakersfield because it was found to have less cost and fewer environmental impacts that the UP alignment option. Please see Section 3.8 for the methods used to calculate potential impacts and a summary of the analysis for agricultural lands. Please see standard responses 5.2.1 and 5.2.3 regarding reducing impacts to farmlands. Please see response to Comment O064-08 in regards to mitigation measures.

O069-07

Please see Section 3.18 which has been added to the Final Program EIR/EIS to further address potential construction related impacts. Potential impacts relating to the "division of neighborhoods" and "socio-economic effects" are summarized in Section 3.7, "Land Use and Planning, Communities and Neighborhood, and Environmental Justice" at a program level of detail. Should the HST proposal move forward, more detailed project specific studies will be required. Please see Section 5, "Economic Growth and Related Impacts" for a summary of the analysis on the potential for HST to "accelerate sprawl". The Authority has identified the BNSF alignment between Stockton and Bakersfield as the preferred HST alignment because it minimizes costs and environmental impacts (please see Section 6A of the Final Program EIR/EIS). The identified preferred HST alignment for the Central Valley does not include "bypasses" of Fresno, Bakersfield, or Merced. The Program EIR/EIS document clearly shows where trains would be operating at "high-speeds" (for example, see Figures 4.3-1 and 4.3-2) and describes the communities (see Chapter 6).

Potential noise related impacts are summarized in Section 3.4. Determining the "specific dBA of noise impacts" is beyond the scope of this program EIR/EIS document. Please see the methodologies for determining potential noise impacts presented in 3.4.1, "Regulatory Requirements and Methods of Evaluation". Should the HST proposal move forward, more detailed project specific analysis will be required. Page 3.4-11 of the Program EIR/EIS references Figure 3.4-7 and Figure 3.4-8. Both of these figures show "a direct comparison with trains running at 217 miles per hour" (the comparison you highlight from the Program EIR/EIS for HST at 150 miles per hour, is made in reference to Figure 3.4-7). The comparisons for Figure 3.4-7 are not "misleading". The purpose of the figure is to give readers an idea of how noisy trains are by comparing them to other things that make noise at distances they are familiar with (home appliances at 3 feet, speech at 3 feet, motor vehicles at 50 feet, jet aircraft at 500 feet, and HST at 100 feet). Table 3.4-1 does not claim that the No Project Alternative or the Modal Alternative would have less noise impacts than the HST Alternative. Table 3.4-1 does not show potential impacts to the No Project Alternative. As clearly stated in the Program EIR/EIS, "For purposes of this analysis, it is assumed that there will be no additional noise and vibration impacts associated with the development of the No Project as compared to existing conditions" (Section 3.4.3A), and "The No Project is used as the basis of comparison. It is assumed that any improvements associated with the proposed Modal and HST Alternatives would be in addition to the No Project conditions" (Section 3.4.3B). Table 3.4-1 ("Summary of Noise Impact Ratings for Alternatives") presents numbers for the "Length (miles) with Potential Noise Impact Rating" for the Modal and HST (a range between the options with the highest ratings and options with the lowest ratings) and directs the reader to Appendix 3.4-B for the rating method. This table shows that the Modal Alternative (which has nearly twice the total miles of length as the HST Alternative) would have 210 miles of alignment that resulted in a ranking of "high" in regards to "potential noise impacts" as opposed to 21-107 miles of alignment that resulted in a ranking of "high" for the HST Alternative.

O069-08

The comment notes that "none of the alternatives for intra-regional travel are taken into account, despite the fact that intra-regional travel amounts to a significant portion, and in some cases a majority, of modal travel…". The inclusion of intra-regional travel modes in the alternatives analyzed in the Program EIR/EIS would not be appropriate, because they would not meet the purpose and need for the proposed HST system. Please see Section 1 "Purpose and Need" for the purpose and objectives of the HST Alternative as defined by the co-lead agencies. The HST system is proposed to primarily serve intercity trips (trips between regions) rather than local intra-regional trips. The planning and implementation of public transit systems are under the jurisdiction of local and regional agencies which are responsible for congestion management programs and land use planning, as well as transit planning. Please also see response to Comment O024-31. The co-lead agencies disagree with your

assessment that the Modal Alternative is an unrealistic "straw man". As stated in Section 2.5 of the Program EIR/EIS ("Modal Alternative"), the co-lead agencies believe that the Modal Alternative represents, "the most reasonable, feasible, and practicable modal improvements" that could provide for a similar level of intercity travel as the proposed HST system and meet the project purpose and need and objectives. Section 2.5, describes the rationale behind the development of the Modal Alternative, the modal alternatives considered and rejected and the Modal Alternative carried forward. The highway network defined for the No Project and Modal Alternatives is comprised of the intercity highway network serving the same intercity travel markets as the HST Alternative. Sections 2.4 and 2.5 of the Final Program EIR/EIS describe the factors used to define the highway network.

O069-09

Please see response to Comment AS009-24.

O069-10

Please see standard response 3.15.2 regarding the level of detail regarding biological impacts and standard response 3.15.13 regarding the intended uses of this PEIR/S. Please see response to Comment AF007 – 2, and standard responses 3.15.6, 3.15.7, and 3.15.11 for additional discussion of the LEDPA. The Co-lead agencies believe that the PEIR/S provides sufficient information to support decisions about whether or not to advance the proposed statewide high speed train system and whether to eliminate some of the alignment options and advance others for further analysis. The Co-lead agencies believe that the only way of determining which mitigation measures are most effective at reducing impacts is during project-level, Tier 2 analyses. Completion of the PEIR/S will enable the Co-lead agencies to study the specific alignments and station sites in more detail; however the PEIR/S would not project construction or activities causing environmental disturbance in any way. The proper stage for considering specific mitigation measures and avoidance alternatives is in the project-level studies. Throughout the multi-year process of developing alternative corridor alignments for the PEIR/S, the intent has been to carry forward those options that are most likely to contain the least environmentally damaging practicable alternative (LEDPA). Please see the Summary of the Final Program EIR/EIS (Section S.8) in regards to the USEPA's and USACE's concurrence that the preferred HST alignment and station options are most likely to contain the LEDPA. The nature and large geographic extent of the Project precludes total avoidance of jurisdictional resources. Even at this stage, every effort has been made to avoid wetland resources. During subsequent project level design and environmental analyses, more detailed analyses will be possible, and additional avoidance and mitigation techniques can and will be applied. For example, one mitigation strategy identified in the Draft PEIR/S is adjustment of alignment plans and profiles within the overall corridor alignment option selected in the through the program environmental process to achieve additional impact avoidance (please see standard response 3.15.7) and/or construction of structures above grade or in tunnels to avoid impacts.

O069-11

The Authority will not pursue HST alignments passing through and under Henry Coe State Park and the Orestimba State Wilderness (see standard response 6.3.1). Please see responses to Comments AL072 regarding impacts to the Grassland Ecological Area. Please see response to Comment AS004 – 50 regarding privately owned conservation lands. Please see standard response 3.15.7 regarding anticipated future studies of the Altamont pass.

O069-12

The co-lead agencies respectfully disagree with the commenter's contentions regarding growth. The HST Alternative is expected to result in some increased growth in central cities without or without less adverse urbanization of undeveloped land, as compared to the other system alternatives considered in the EIR/EIS. The co-lead agencies respectfully disagree with the commenter's contention that the analysis underestimates the level of induced growth from the HST Alternative. The Draft Program EIR/EIS reports that the HST

Alternative will potentially induce more population, employment, and income growth than the other system alternatives, particularly in the Central Valley. While some individuals, organizations and jurisdictions may be "expecting a lot of growth in the Valley", the projected rates of growth inducement reported in Chapter 5 of the Draft Program EIR/EIS represents the effect that a $37 billion HST system constructed over multiple years will have in a state that had a year 2003 gross state product of $1.45 trillion[1]. Please see standard response 5.2.3 for issues related to the analysis of growth inducement and indirect impacts for the Draft Program EIR/EIS. Please see standard response 5.2.4 and standard response 5.2.5 for issues related to use of HST by long-distance commuters.

The co-lead agencies respectfully disagree with the commenter's contention that the Draft Program EIR/EIS failed to review the potential indirect impacts to farmland and other natural and human resources. Section 5.4.7 of the Draft Program EIR/EIS presented a detailed quantitative assessment of potential indirect impacts to farmland and agriculture based on urbanization footprint projections for each system alternative. Assessment of indirect impacts in 15 other resource topics was also conducted and reported in Section 5.4 of the Draft Program EIR/EIS. Please also see standard response 5.2.3 for issues related to water usage and public resources, and standard response 5.2.1 for issues related to mitigation of significant indirect impacts.

O069-13

The co-lead agencies disagree with your assessment. Please see Section 5, "Economic Growth and Related Impact" for a summary of the potential impacts related to growth inducement for both the HST and Modal alternatives (this Section also includes a sub-Section on "Air Quality", Section 5.4.2). Please also see Section 3.3 "Air Quality". The method used to quantify potential localized air quality impacts is presented in Section 3.3.1D. Please see standard response 2.1.12 in regards to parking at stations and transit oriented development.

O069-14

Electric Power Demand – The Co-lead agencies do not agree that any increase in the use of electric power would necessarily result in a significant impact. The Co-lead agencies acknowledge that problems have been experienced in meeting demand for electricity in California, but believe that the proper way of addressing potential problem of this type is to identify future electrical needs through environmental planning studies, such as this one, and provide California's energy providers and regulators with this information as they consider plans to meet future demands. The increased demand for electricity can be met in any number of ways from funding conservation programs to constructing new generating capacity. The fact that the high speed train system would use electricity is not grounds for rejecting the HST Alternative. Global Warming and Secondary Energy Use– The PEIR/S compared a No Project, Modal Alternative (consisting of expanded highways and airports) and HST Alterative and found that the HST alternative would use less energy than the Modal Alternative. The HST system would use electrical energy for propulsion rather than petroleum (used in the highway and airport systems). Although some electricity would be generated burning fossil fuels, the amount would be far less than would be consumed by meeting California's future transportation demand through the increased use of automobiles, trucks, and airplanes. The HST Alternative is anticipated to result in fewer CO2 emissions overall than the No Project or Modal Alternatives as reported in the air quality analysis (PEIR/S section 3.3).Similarly for secondary energy, the Modal Alternative would require similar levels of secondary energy use (to access airports or highway interchanges) as the HST Alternative. The HST Alternative could help to focus and increase the density of future development, which would reduce the energy impacts of access trips to high speed rail stations.

[1] Source: United States Department of Commerce, Bureau of Economic Analysis. http://www.bea.doc.gov/bea/newsrel/GSPNewsRelease.htm

It is not appropriate for the analyses in the Program EIR/EIS to speculate on potential global warming trends in California and, based on that speculation, further speculate by estimating increased energy demand from global warming.

O069-15

For the Program EIR/EIS the traffic analysis has been completed at a regional level of detail based on regional modeling data and general locations of stations. Should the HST program move forward detailed intersection level traffic analysis will be required as part of subsequent project specific analysis. Should the HST proposal move forward, the Authority and the FRA will work closely with the local jurisdictions and other stakeholders to ensure consistency with formalized traffic impact guidelines and to ensure that adequate access improvements are identified to minimize and mitigate potential traffic impacts. Identification of specific traffic impacts and mitigations for station areas will be very site specific and require significantly more definition in the proposed facilities, which will be available in the subsequent project level studies.

O069-16

The noise impact analysis was done at a program level of detail. Further consideration of "secondary noise impacts" (e.g. shadow impacts from barriers, potential impacts on HST passengers) is beyond the scope of this program process. Should the HST proposal move forward, more detailed project specific studies will be required. However, it should be noted that noise barriers have been extensively utilized as a means of mitigating sensitive noise impacts for HST systems throughout the world. The co-lead agencies disagree with your assertion, "The DPEIR/S asserts that such noise barriers would reduce, but not eliminate significant noise impacts". Section 3.4.5 "Mitigation Strategies" of the Program EIR/EIS states under "*A. Noise Barriers*", "In most cases the potential noise impacts could be reduced from the severe impact category to the FRA's impact category, and to the no impact category in some locations with the application of appropriately dimensioned noise barriers next to the tracks."

O069-17

Please see response to Comment O044 – 18 regarding the environmental justice evaluation. The Co-lead agencies agree that more detailed analysis of environmental justice issues, including identification of specific mitigation measures, must be completed as part of the project-level, Tier 2 evaluations. The Co-lead agencies believe that the environmental analysis completed for the PEIR/S is sufficient for the purposes of the PEIR/S (deciding whether to continue studying the statewide high speed rail system and eliminating some of the alignment options from further consideration) and also meets the intent and requirements of the environmental justice executive order for this program level environmental review.

O069-18

The No Project alternative does include all projects in the existing California STIP and adopted regional transportation plans (see PEIR/S page S-3). The proposal is defined as a statewide high speed train system to serve interregional and intercity transportation needs, and is expressly not the sum total of all improvements that may (or may not) be needed to meet all types of transportation needs caused by projected growth in California. See response O069-14 for more information on energy analysis. The Co-lead agencies believe that the cumulative growth analysis presented in the Final Program EIR/EIS (Section 3.17) is sufficient for this program-level evaluation. Please also see standard response 3.17.1.

O069-19

Please see response to Comment O064-08 in regards to suitable mitigation measures.

O069-20

Please see standard response 2.18.1. The co-lead agencies determined that the ridership and revenue forecasts done to support the Authority's June 2000 Business Plan were sufficient for this

program level process. Please also see standard response 2.1.1 and 2.1.2.